



U.S. AIR FORCE

Using Stories & Scenarios in Online Learning

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26 May 2004

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Overview



- Why use these strategies?
- What are the underlining instructional theories and concepts?
- Examples and demos



Why Use ?

- Consistent with learning theory
 - Constructivist
 - Situated Learning
 - Experiential Learning
- Reality-based strategies enhance relevancy of instruction & motivate the learner
 - Especially if enhanced by interactivity & emotional arousal



Learning Theory

Constructivist Theory (D. Jonassen)

- Foster learning & problem solving skills by
 - Promoting learner control & ownership
 - Focusing on what practitioners actually *do* (authentic)
 - Addressing real-world context



Learning Theory



Situated Learning & Functional Context (T. Sticht)

- Need to make learning relevant to
 - Experience of workers & their work context
 - Prior knowledge
- Should utilize material & equipment that learner will actually use in work environment



Learning Theory

Experiential Learning (C. Rogers)

- Two types of learning
 - Cognitive (meaningless); Experiential (significant)
- Learning is facilitated when
 - Student fully participates & has control (self-initiated)
 - Based on direct confrontation with realistic problem (practical, social, personal or research)
 - Subject matter is relevant
 - Threat to learner is low



Concept of Motivation



- Motivation is created by challenge, fantasy, curiosity (Malone)
- Four components of motivation (Keller)
 - Arousing interest
 - Creating relevance
 - Developing an expectation of success
 - Producing satisfaction through intrinsic (goal-oriented) & extrinsic (rewards) means



How to Motivate Learning



- Thinking cannot be fully comprehended if *emotions* and *motivations* are ignored....The things we attend to and remember are the things that are important to us. In such situations, cognitive processing will be accompanied by emotional arousal...the opportunity for coordinated learning across brain systems is greater during emotional states.

Joseph LeDoux

Synaptic Self: How Our Brains Become Who We Are



Demo



- Resource Advisor Course
 - Uses scenarios, stories & humor in a realistic work environment
- Esperanza & Sixth Watch
 - Reusable fictional scenario with realistic problem application



Demo



- OODA LOOP
 - Scenario-based game leveraging expectation of success & humor
- Pumper (Firefighter) Course
 - Uses real problem in context



Summary

- Real-world stories, scenarios, emotion -> motivation -> learning
- Reference: Theory into Practice (TIP) website:
<http://tip.psychology.org>
- These demos available through the AFIADL website:
<http://www.au.af.mil/au/afiadl>



Information

- For more information contact

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